ABSTRACT

Method and apparatus for secure transmissions. Each user is provided a registration key. A long-time updated broadcast key is encrypted using the registration key and provided periodically to a user. A short-time updated key is encrypted using the broadcast key and provided periodically to a user. Broadcasts are then encrypted using the short-time key, wherein the user decrypts the broadcast message using the short-time key. One embodiment provides link layer content encryption. Another embodiment provides end-to-end encryption.